



## Buffer Capacitors for Tube Auto Radios

We sell a complete line of high voltage capacitors for vintage tube radios, including extra high voltage Buffer Capacitors for old car radios. When restoring a car radio that uses vacuum tubes it is standard practice to replace the original paper capacitors and electrolytic capacitors. Of all the old paper capacitors, the buffer capacitor is the capacitor that is most prone to failure. Replacing the buffer capacitor is therefore essential. In addition to capacitors, we also carry schematics and service information for vintage auto radios.



### About Buffer Capacitors

Buffers make use of the energy-absorption characteristic of a capacitor to prevent contact arcing. They are installed in parallel with contacts to prevent damage to the contact material. A challenge faced by buffer capacitors is the sudden voltage "surge" as contacts close. Also rapidly vibrating contacts cause a buildup of voltage.

What does this mean to you? ...it means that when choosing a buffer capacitor it must be able to handle extremely high voltages and must resist corona. Most original buffer capacitors were rated between 1000V and 1600V. **Your replacement buffer cap must meet or exceed the original voltage rating. It should also have superior "surge" voltage handling capability.**

Nowadays either poly film or ceramic disc capacitors are used as buffer capacitors. Disc capacitors are economical and their compact size makes installation easy. Other radio restorers prefer film capacitors as they feel the radio sounds better. **If choosing a film cap, just be sure it is a "high corona" type so that the capacitor will not breakdown due to cumulative voltage build-up.**

We carry both 1600 Volt Ceramic Disc and 1600 Volt and Polypropylene Film **Orange Dip** capacitors for your buffer capacitor needs. Please see specifications below.

### JustRadios Services



Schematics and Service Data for Vintage Auto Radios



**CAPACITORS for Tube Radios**  
Capacitor Price List  
Capacitor Kits  
Capacitor Tips

**Antique Radio Schematics**  
Transistor Radio Schematics

### Buffer Capacitor Features and Specifications

### Ceramic Disc Buffer Capacitors



#### Capacitor Specifications:

- "General Purpose" Ceramic Disc Capacitor.
- Coated with epoxy resin for superior humidity, heat and solvent resistance.
- Compact size and long 30mm radial leads for easy "under chassis" installation.
- Good solderability.
- Insulation Resistance: 10,000 megaohms (min).
- Operating Temperature Range: -30C to +85 C.
- Rated Voltages: **1600 Volts**
- **Surge**Test Voltage: 2.5 times the rated voltage for 5 second (4000 V for 5 seconds).
- Capacitance Range: All sizes 0.001uF all the way up to 0.047 uF.
- Highly stable and reliable capacitor.
- Use for coupling, blocking, by-pass and filter applications.
- Suitable as **buffer capacitor is old car radios**.
- Economical and compact replacement for high voltage paper capacitors in tube applications.

### Metalized Polypropylene Buffer Capacitors



#### Capacitor Specifications:

- Constructed with special series metalized polypropylene film dielectric MPM.
- Electrode and lead spot welded so that equivalent series resistance (ESR) is minimized.
- Excellent replacement for paper/wax capacitors in **tube radios** where extra high voltage protection is needed ie **buffer capacitors** in car tube radios.
- Rated Voltage: **1600 Volts DC**
- **Surgetest** Voltage: 160% of Rated Voltage for 60 sec (ie 2560 Volts for one minute)
- Orange Epoxy dipped **Orange Dips** for superior heat, moisture and solvent resistance.
- Non-Inductively Wound with Self-healing property
- **EXTRA** Long (30mm) tinned copper radial lead wires for easy "under chassis" installation and good solderability.
- **High corona starting voltage** for high reliability and long life.
- Low DF and inherent temperature rise. High current rating and right dv/dt.
- Flame retardant epoxy coating (UL-class 94V-O).
- Space saving compact size.
- Operating temp. range: -40 to +85 C.
- Capacitance tolerance is +/- 10 percent.
- Capacitance Sizes Available (MFD): 0.001mfd; 0.0022mfd; 0.0033mfd; 0.0047mfd; 0.0068mfd; 0.0082mfd and 0.01mfd.
- Dissipation Factor at 1KHz =< 1%
- Insulation Resistance(min): 50000 Mohm at 25C.
- Ideal for high frequency and high pulse circuits, such as tube car radios, power supplies, electric ballast, TV/Monitor resonance circuits..
- ISO 9001 & 9002 certified.

#### JustRadios - Capacitor Product Line:

Metalized Polypropylene Capacitors - 630 Volt **Axial** Tubulars

Metalized Polyester Film Capacitors - 630 Volt **Axial** Tubulars

Metal-Foil Polypropylene Capacitors- 630 Volt **Orange Dips**

Metalized Polyester Film Capacitors - 630 Volt **Orange Dips**

Metalized Polypropylene Capacitors- 1600 Volt **Orange Dips**

Mylar Film Capacitor "Bargain Bin" - on sale in Bags of 50

Ceramic Disc Capacitors - 1600 Volts

High Voltage Electrolytic Capacitors - Radial Leads

High Voltage Electrolytic Capacitors - Axial Leads

Capacitor Price List and Order Form

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